

Llandyfaelog Substation Project Information Booklet

June 2025



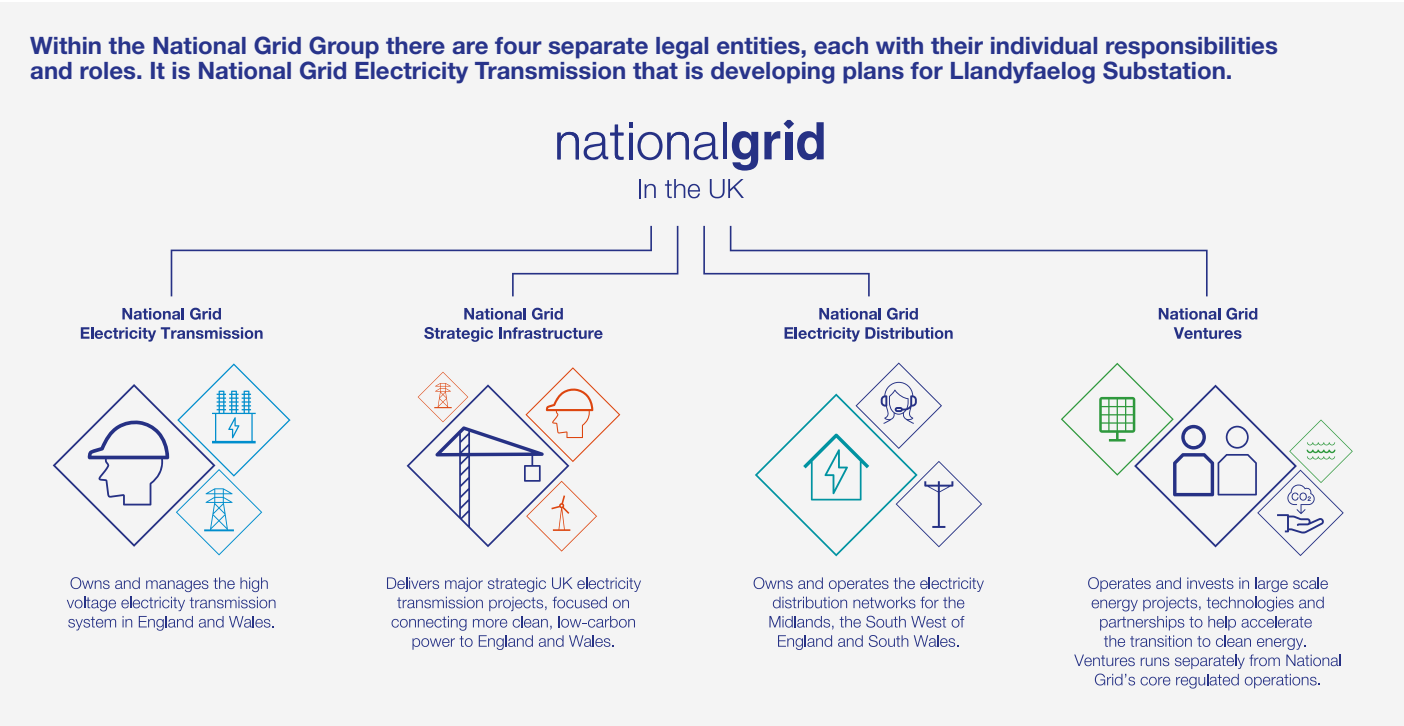
nationalgrid

About National Grid

National Grid delivers electricity safely, reliably, and efficiently to the customers we serve – all while working towards building a cleaner, fairer energy system for the future.

We don't generate electricity. We own and maintain the high voltage transmission network in Wales and England, transporting large amounts of electricity at high voltage from where it is generated to where it is needed.

Local network operators then deliver it at lower voltages to individual homes and businesses.



Our community consultation

National Grid is holding a public consultation on its initial proposals for a new substation near Llandyfaelog.

We think it is important to share information about our project with people living and working locally and we would like to hear what you think. Join us at an in-person event or an online webinar to meet the project team, find out more and have your say. **The deadline for feedback is 11:59 on 15 July 2025.**

Venue	Time and date
Llandyfaelog Community Hall Llandyfaelog SA17 5PA	Wednesday 25 June 1–7pm
Online webinar (register and link available on our website)	Tuesday 8 July 6:30–8pm
Llandyfaelog Community Hall Llandyfaelog SA17 5PA	Saturday 12 July 11am–4pm

Find out more and provide feedback on our website at: nationalgrid.com/llandyfaelog (Scan the QR code to go direct to the website).



Why is a new substation needed?

National Grid is proposing a new 400 kV substation near Llandyfaelog, south of Carmarthen, to help meet the growing demand for electricity in the area.

We are building the substation in response to connection requests NGET has received in South Wales from Green Gen Cymru and National Grid Energy Distribution (NGED).

NGET have a legal obligation to connect customers to our network

when a connection is requested. When existing substations do not have the capacity for the size of the connection required, we are required to build a new one to meet the need. In this case, we are proposing a new substation near Llandyfaelog.

NGET will own and maintain the proposed 400 kV substation near Llandyfaelog. The generators will require their own substations alongside the NGET 400 kV substation and will be responsible

for securing their own planning permission. Each project is distinct from one another and is responsible for securing individual planning permissions for any proposed infrastructure.

The proposed substation near Llandyfaelog will help meet electricity demand in South Wales.

What is a substation?

Substations are critical parts of the transmission and distribution networks and enable electricity to be transmitted at different voltages, securely and reliably.

One of the main roles of substations is to convert electricity into different voltages. This is needed so the electricity can be transmitted throughout the country and then distributed throughout local neighbourhoods and into our homes, businesses and buildings.

NGET takes electricity generated from power sources and transports it through its network of overhead lines, cables, and substations. It is then transmitted at a lower voltage via the local distribution networks to homes and businesses.

Example of a 400 kV substation for illustrative purposes only



Our proposals

Design of the substation

As we have been developing the project, we have undertaken a range of ground investigations, surveys and assessments to understand the project area and its characteristics. Our proposed site was selected as the most suitable following this work, which included assessments of local topography and the proximity to the existing overhead line. This allows us to reduce potential impacts to the local community.

The proposed Llandyfaelog substation site will comprise of a single platform with the three substation compounds within its footprint: one 400 kilovolt (kV) substation built and operated by NGET, and two smaller 132 kV substations built and operated by Green Gen Cymru and NGED respectively.

Constructing a single platform to form the base for all three substations enables more efficient land use, effective drainage and reduced construction impacts for the three substations.

The proposed size of the NGET substation compound is 155 metres x 602 metres and the total platform, incorporating the drainage and access requirements of the two 132kV substation compounds, is 260 metres x 640 metres. These proposed measurements may be subject to change following further surveys and assessments.

NGED and Green GEN Cymru will still be required to apply for separate planning permissions to be able to construct their proposed substation compounds, as well as the connections into the proposed 400 kV substation.

Transport and access

We recognise that future construction traffic may have an impact locally, and we will produce a comprehensive traffic management

plan to minimise this where possible. This will be submitted with our planning application.

We are considering creating a new access road into the site which will run parallel to the existing country road to the north. This will lessen the impact on the existing country lane and allow us to construct a bespoke junction with the A484 which is designed to safely accommodate construction traffic.

Landscape and visual impacts

We have completed a landscape and visual assessment of the project which will inform a landscape strategy. The strategy will confirm how we intend to minimise the landscape and visual impacts of the project, where possible.

As part of this consultation, we are seeking feedback on our proposed natural screening, which includes areas of new scrub, hedgerows and reinforcing existing hedgerows.

Impact on the environment

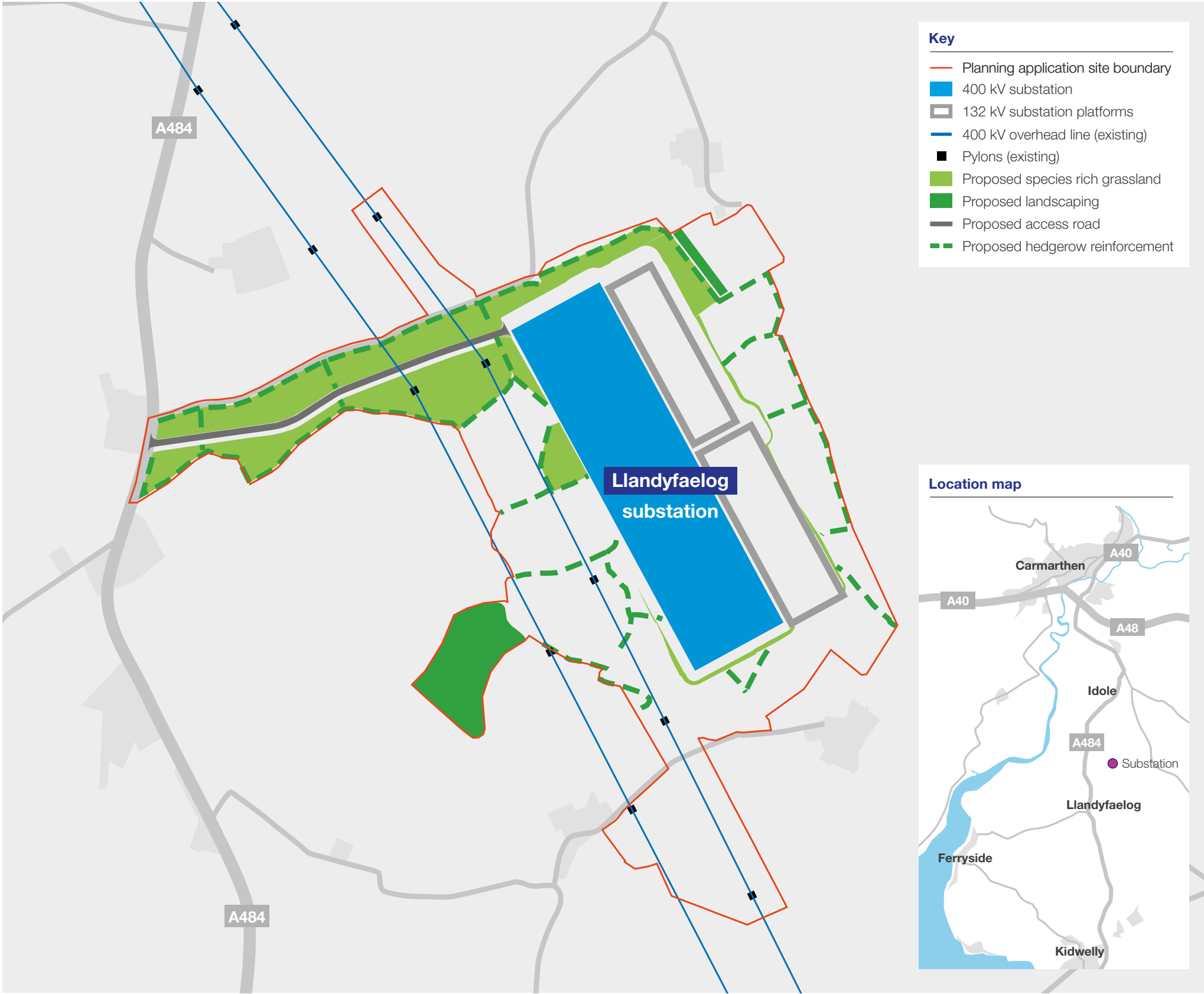
NGET are committed to ensuring a 10% net benefit for biodiversity, which means that the local environment will be left in an improved biodiverse state than before the start of the project. This will be achieved by a range of measures, such as habitat creation and enhancement for protected species.

Our landscaping plans are proposed to help us achieve this. We are currently exploring other ways to hit our target and welcome your feedback.

Noise levels and air quality

Noise and air quality assessments will be submitted as part of our planning application. Measures will be identified to limit any noise and air quality impact from the project during future construction and operation phase.

Map of proposals



What happens next?

We believe it is important to share information about our project with people living and working locally and receive feedback. The feedback will help us shape our plans as we continue to develop our proposals.

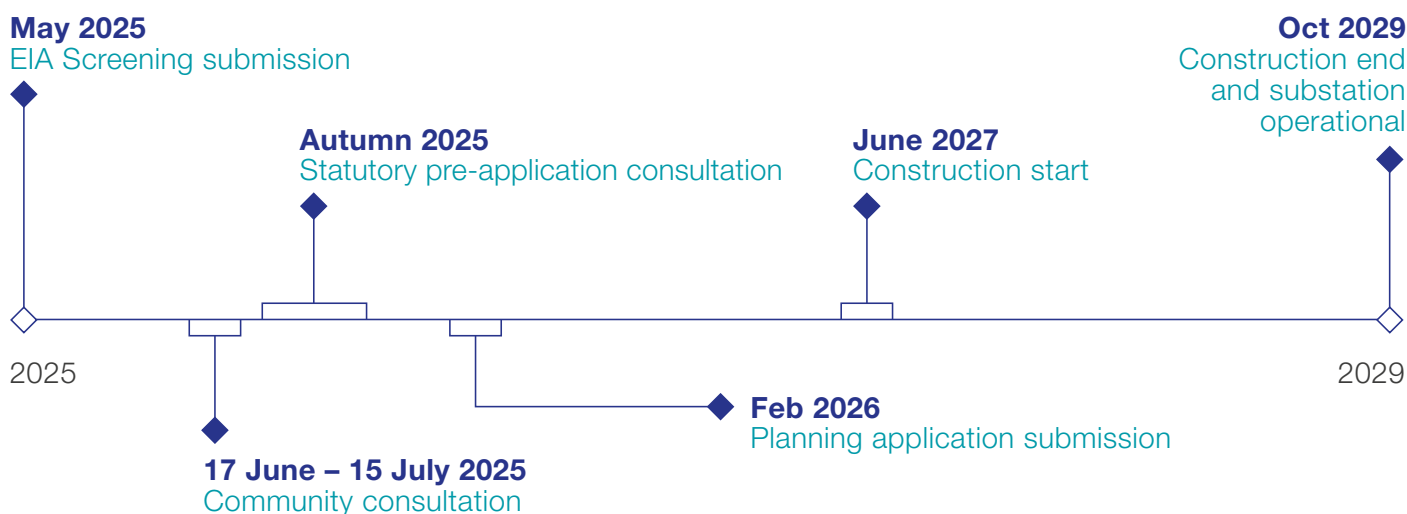
We have submitted our Environmental Impact Assessment (EIA) Screening request to Carmarthenshire County Council to reflect the latest plans and requirements for the substation.

We will continue our discussions with landowners and undertake surveys, technical and environmental work in and around the proposed substation site to give us more information about the area and to help inform our plans. You may see us, and our contractors, working in and around the proposed site.

We will hold a further consultation on our proposals before we submit a planning application to Carmarthenshire County Council in 2026.



Indicative project timeline



Have your say

We think it's really important to work with people living and working locally as we develop our plans and we want to hear from you.

Our consultation on the proposed substation runs from **17 June** to **11:59pm on 15 July 2025**.

Feedback can be provided by:

- Completing an online feedback questionnaire:
Nationalgrid.com/Llandyfaelog
- Filling out a paper feedback questionnaire and sending it to the Freepost address below – if you haven't been sent one, please call us on: **0800 915 3595** and we will post one to you.
- Sending us an email: **Llandyfaelog@nationalgrid.com**
- Writing to us (no stamp required) at: **FREEPOST NG Llandyfaelog**